

Serial No.: 09/692,303

In the Claims:

Please cancel claims 1-5 without prejudice:

Claims 1-5. (Cancelled).

6. (Previously presented) A process for coating a substrate to provide a non tacky protective coating or film thereon, said process comprising the steps of:

- i) providing a radiation curable hot melt composition comprising a) 20 to 100 wt.% of a radiation curable resin or a mixture of radiation curable resins having a viscosity in the range from 15 to 10,000 mPas in the temperature range from 40 to 150°C, b) 0 to 50 wt.% of a hydroxyfunctional resin or oligomer or a mixture of hydroxyfunctional resins or oligomers, c) 0 to 10 wt.% of a photoinitiator, d) 0 to 50 wt.% of fillers and/or additives, and e) 0 to 40 wt.% of pigment, wherein the total amount of components a) to e) adds up to 100 wt.%,
- ii) heating said hot melt composition to a temperature in the range from 40 to 150°C,
- iii) applying said hot melt composition to the substrate in the form of a coating or thin film, and
- iv) curing said hot melt to a non-tacky coating solely by exposing the coated substrate to electromagnetic radiation having a wavelength $\lambda \leq 500$ nm.

7. (Original) The process according to claim 6, wherein the substrate is a heat-sensitive substrate.

8. (Original) The process according to claim 7, wherein the substrate contains cellulose and/or plastic and the hot melt composition is heated to a temperature in the range from 40 to 100°C.

9. (Original) The process according to claim 6, wherein the hot melt composition comprises a resin or a mixture of resins with a T_g below 0°C.

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10. (Original) The process according to claim 6, wherein the hot melt composition comprises a polyesteracrylate resin.

11. (Previously presented) A process for coating a substrate to provide a non tacky protective coating or film thereon, said process comprising the steps of:

- i) providing a radiation curable hot melt composition comprising a) 20 to 100 wt.% of a radiation curable resin or a mixture of radiation curable resins having a viscosity in the range from 15 to 10,000 mPas in the temperature range from 40 to 150°C, b) 0 to 50 wt.% of a hydroxyfunctional resin or oligomer or a mixture of hydroxyfunctional resins or oligomers, c) 0 to 10 wt.% of a photoinitiator, d) 0 to 50 wt.% of fillers and/or additives, and e) 0 to 40 wt.% of pigment, wherein the total amount of components a) to e) adds up to 100 wt.%,
- ii) heating said hot melt composition to an application temperature in the range from 40 to 90°C,
- iii) applying said hot melt composition to the substrate in the form of a coating or thin film, and
- iv) curing said hot melt coating by exposing the coated substrate to electromagnetic radiation having a wavelength $\lambda \leq 500$ nm.

12. (Previously Presented) The process according to claim 11, wherein the substrate is a heat-sensitive substrate.

13. (Previously Presented) The process according to claim 12, wherein the substrate contains cellulose and/or plastic and the hot melt composition is heated to a temperature in the range from 40 to 100°C.

14. (Previously Presented) The process according to claim 11, wherein the hot melt composition comprises a resin or a mixture of resins with a T_g below 0°C.

15. (Previously Presented) The process according to claim 11, wherein the hot melt composition comprises a polyesteracrylate resin.

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16. (Previously Presented) A process for coating a substrate to provide a non tacky protective coating or film thereon, said process comprising the steps of:

i) providing a radiation curable hot melt composition comprising a) 40 to 90 wt.% of an ultraviolet radiation curable polyester acrylate resin having a viscosity in the range from 15 to 10,000 mPas in the temperature range from 40 to 150°C, b) 0 to 50 wt.% of a hydroxyfunctional resin or oligomer or a mixture of hydroxyfunctional resins or oligomers, c) 0 to 10 wt.% of a photoinitiator, d) 0 to 50 wt.% of fillers and/or additives, and e) 0 to 40 wt.% of pigment, wherein the total amount of components a) to e) adds up to 100 wt.%,

ii) heating said hot melt composition to a temperature in the range from 40 to 150°C,

iii) applying said hot melt composition to the substrate in the form of a coating or thin film, and

iv) curing said hot melt to a non-tacky coating solely by exposing the coated substrate to electromagnetic radiation having a wavelength $\lambda \leq 500$ nm.

17. (Previously Presented) The process according to claim 16, wherein the hot melt composition further comprises a UV curable polyurethane acrylate resin and/or a UV curable epoxy acrylate resin.